Remarks

Claims 1-14 are pending in the application. Claim 15 has been withdrawn from consideration. Claim 9 is indicated as having allowable subject matter. Claims 1, 10, and 11 have been amended. Reconsideration and re-examination of the application is respectfully requested for the reasons set forth herein.

1. The Examiner has rejected claims 1, 3-8, and 10-14 under 35 U.S.C. 103(a) as being unpatentable over Hashiba et al. (US Patent No. 4,780,641) in view of Ito et al. (US Patent No. 5,672,935).

With regard to claims 1 and 11, the Examiner stated that Hashiba et al. discloses an apparatus for retaining a damper wire on a grill type mask assembly in a cathode ray tube. The grill type mask assembly has a frame 13 and a mask 3. A damper spring 21 has a first metallic layer disposed on a second metallic layer (column 3, lines 20+). The damper spring has a first end and an opposing second end. The second end is coupled to the frame 13. A tab 22 is formed on the damper spring 21 and adapted to accept the damper wire that traverses the mask. Hashiba et al. is silent in regard to the material the first layer is made of. One of ordinary skill in the art, however, would recognize that since Hashiba et al. teaches seam welding a stainless steel strip to the spring that the first layer would have to be metallic because seam welding can only occur between two metallic pieces. Hashiba et al. further fails to disclose the first metallic layer being materially different from the second metallic layer. Ito et al. discloses a first metallic layer made of a high expansion coefficient metal, and a second metallic layer made of a low expansion coefficient metal. The Examiner, therefore, concluded that one of ordinary skill in the art at the time the invention was made would have been motivated to make the damper spring of Hashiba et al. with two materially different metallic layers as taught by Ito et al. so that the spring is formed to have a

temperature correction mechanism (column 1, lines 34+) where the spring is pliable when the temperature rises in the cathode ray tube yet rigid enough to keep the damper wire taunt in order to prevent damage to the cathode ray tube during mask vibration.

Claim 1 has been amended to state that the damper spring comprises a first metallic layer disposed on a second metallic layer...and a tab formed on said damper spring and adapted to accept said damper wire that traverses the mask, said damper wire being coupled between said tab and said damper spring. Hashiba et al. teaches a pair of spring elements 21 having a thin band 7 of stainless steel welded to a surface thereof to fix the damper wire 4 to the spring element 21. Each spring element 21 has a recess 22 formed on a free end for temporarily securing the damper wire 4 stretched between the springs 21. Ito et al. teaches a supporting member 3 composed of a spring 31 and a metallic plate 32 for connecting the spring 31 with a frame 2. The spring 31 comprises a bi-metal consisting of a high expansion coefficient metal 312 and a low expansion coefficient metal 313 adhered to each other so that the high expansion coefficient metal 312 is positioned on a panel front portion 10 side while the low expansion coefficient metal 313 is positioned on a electron gun side. The bi-metal spring 31 of the supporting member 3 curves to correct thermal deformation caused by an electron beam hitting the aperture grill 1. Claim 1 requires the damper wire to be coupled between the tab and the damper spring wherein the damper spring comprises first and second metallic layers. As such, the damper wire is coupled between the tab and the first and second metallic layers. Neither Hashiba et al. nor Ito et al. teach a damper wire coupled between a tab and first and second metallic layers. Hashiba et al. teaches a spring element 22 with a tab 22 that temporarily secures the damper wire 4 on the spring element 21. Hashiba et al. further teaches a spring element 21 with a thin band 7 of stainless steel welded to a surface thereof with a damper wire 4 positioned therebetween. As such, the damper wire 4 of Hashiba et al. is not coupled between a tab and first and second metallic layers of a damper

spring. Ito et al. does not teach a damping wire coupled to the supporting member 3. The combination of Hashiba et al. in view of Ito et al., therefore, does not teach or suggest all of the elements of claim 1. Removal of the rejection of claim 1 under 35 U.S.C. 103(a) is respectfully requested.

Claims 3-8 depend from independent claim 1. As previously discussed, the combination of Hashiba et al. in view of Ito et al. does not teach all the elements of amended claim 1. Because the combination of Hashiba et al. in view of Ito et al. does not teach all the elements of claim 1, the combination of Hashiba et al. in view of Ito et al. does not teach all the elements of claims 3-8. More specifically, the combination of Hashiba et al. in view of Ito et al. does not teach all the elements of claim 8 wherein the damper wire is welded between the tab and the damper spring comprising first and second metallic layers. Removal of the rejection of claims 3-8 under 35 U.S.C. 103(a) is respectfully requested.

Claim 11 has been amended to state that the cathode ray tube comprises a damper spring coupled to said mask including a portion formed by a first layer having a first coefficient of thermal expansion coupled to a portion formed by a second layer having a higher coefficient of thermal expansion, said second layer substantially covering said first layer on a side of said damper spring facing away from said mask and coupled to said mask through said first layer arranged therebetween for varying a tension in said damper spring to compensate for changes induced by corresponding changes in temperature within said cathode ray tube. As previously discussed, Hashiba at al. teaches a pair of spring elements 21 having a thin band 7 of stainless steel welded to a surface thereof to fix the damper wire 4 to the spring element 21. Ito et al. teaches a supporting member 3 composed of a spring 31 and a metallic plate 32 for connecting the spring 31 with a frame 2. The spring 31 comprises a bi-metal consisting of a high expansion coefficient metal 312 and a low expansion coefficient metal 313 adhered to each other so that the high expansion coefficient metal 312 is positioned

on a panel front portion 10 side while the low expansion coefficient metal 313 is positioned on a electron gun side. The bi-metal spring 31 of the supporting member 3 curves to correct thermal deformation caused by an electron beam hitting the aperture grill 1. Claim 11 requires a first layer having a first coefficient of thermal expansion to be coupled to a portion formed by a second layer having a higher coefficient of thermal expansion, said second layer substantially covering said first layer on a side of said damper spring facing away from said mask and coupled to said mask through said first layer arranged therebetween. As shown in Figure 3 of Hashiba at al., Hashiba at al. does not teach or suggest a damper spring formed of a first layer and a second layer wherein the second layer substantially covers the first layer of a side of the damper spring facing away from the mask. As shown in Figure 6 of Ito et al., Ito et al. fails to teach or suggest a high expansion coefficient metal 312 positioned closer to an aperture grill 1 than a low expansion coefficient metal 313. Additionally, the high expansion coefficient metal 312 and the low expansion coefficient metal 313 are directly attached to the metallic plate 32 such that the high expansion coefficient metal 312 is not coupled to the aperture grill 1 through the low expansion coefficient metal 313. Further, the high expansion coefficient metal 312 does not substantially cover a side of the low expansion coefficient metal 313. The combination of Hashiba et al. in view of Ito et al., therefore, does not teach or suggest all of the elements of claim 11. Removal of the rejection of claim 11 under 35 U.S.C. 103(a) is respectfully requested.

Claims 12-14 depend from independent claim 11. As previously discussed, the combination of Hashiba et al. in view of Ito et al. does not teach all the elements of claim 11. Because the combination of Hashiba et al. in view of Ito et al. does not teach all the elements of claim 11, the combination of Hashiba et al. in view of Ito et al. does not teach all the elements of claims 12-14. Removal of the rejection of claims 12-14 under 35 U.S.C. 103(a) is respectfully requested.

Although, claim 10 has been rejected under 35 U.S.C. 103(a), it appears from the language of the rejection, which mirrors the 35 U.S.C. 102(b) rejection in the preceding office action mailed January 14, 2003, that claim 10 was meant to have been rejected under 35 U.S.C. 102(b). With regard to claim 10, the Examiner stated that Hashiba et al. discloses an apparatus for retaining a damper wire proximate a grill type mask assembly in a cathode ray tube. The grill type mask assembly has a frame 13 and a mask 3. A damper spring 21 comprises a first end having a curvature and an opposing second end. The second end is coupled to the frame 13. The first end has a curvature aligned with an edge of the mask 3 for adjustably defining an elevation level of the damper wire with respect to the mask 3. The Examiner, therefore, concluded that Hashiba et al. teaches all the elements of claim 10.

Claim 10 has been amended to correct antecedent basis and to state that the damper spring comprises a first end having a curvature and an opposing second end...the curvature having an apex facing away from and aligned with an edge of the mask for adjustably defining an elevation level of the damper wire with respect to the mask. Hashiba et al. teaches spring elements 21 having a free end formed with either a recess 22 or a projection 23. The free end is curved and has an apex (at recess 22 and projection 23) formed essentially perpendicular to an edge of the grid elements 3 that faces away from a major surface of the grid elements 3. Thus, unlike the claimed invention, the apex of Hashiba et al., does not face away from an edge of the mask. Hashiba et al., therefore, does not teach or suggest all of the elements of claim 10. Removal of the rejection of claim 10 under 35 U.S.C. 102(b)/103(a) is respectfully requested.

In view of the amendments and arguments presented herein, the application is considered to be in condition for allowance. Reconsideration and passage to issue is respectfully requested.

Respectfully submitted,

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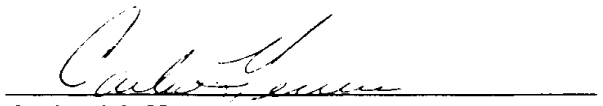

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